

AMENDMENT TO THE CLAIMS:

This following list of claims will replace all prior versions and listing of claims in this application.

1-37. (Canceled).

38. (Currently Amended) An auxiliary power unit configured to be coupled to a torque bearing element of a primary power unit, comprising:

~~an expander~~ a fly wheel comprising a drive shaft and a plurality of blades;

an injection nozzle for injecting a condensable fluid towards the plurality of blades;

a clutch system configured to selectively couple the drive shaft to the torque bearing element[[],]; and

a control system configured to control the clutch system to selectively couple the drive shaft to the torque bearing element,

wherein the control system is configured to adjust a characteristic parameter of the condensable fluid to adjust a rotational speed of the drive shaft,

wherein the control system comprises a first sensor for detecting a speed of the torque bearing element and a second sensor for detecting the speed of the drive shaft,

wherein the control system is configured to adjust the characteristic parameter of the condensable fluid based on the detected speeds of the torque bearing element and the drive shaft.

39. (Previously Presented) The power unit of claim 38, wherein the condensable fluid comprises superheated vapor.

40. (Previously Presented) The power unit of claim 38, wherein the torque bearing element is a crankshaft of an engine.
41. (Previously Presented) The power unit of claim 38, wherein the primary power unit is an automobile engine.
42. (Currently Amended) The power unit of claim 38, further comprising a condensation chamber for condensing the condensable fluid, the condensation chamber comprising an inlet and an outlet, wherein at least a portion of the plurality of blades is disposed ~~adjacent in~~ in the inlet of the condensation chamber.
43. (Currently Amended) The power unit of claim 42, wherein the condensation chamber and the ~~expander~~ fly wheel are housed adjacent to one another ~~in~~ within an expander housing.
44. (Previously Presented) The power unit of claim 42, wherein the outlet of the condensation chamber is hydraulically connected to a condenser.
45. (Currently Amended) The power unit of claim 38, further comprising a gear system for mechanically coupling the drive shaft of the ~~expander~~ fly wheel to the clutch system.

46. (Previously Presented) The power unit of claim 38, further comprising a condensation chamber for condensing the condensable fluid, wherein the condensation chamber is positioned inside a housing that houses the expander wheel.
- 47-48. (Canceled).
49. (Currently Amended) The power unit of claim 47 38, wherein the characteristic parameter comprises at least one of: pressure, temperature, and mass flow rate of the condensable fluid.
50. (Previously Presented) The power unit of claim 38, wherein the power unit is detachably mountable to the primary power unit.
51. (Currently Amended) An auxiliary power unit comprising:
- ~~an expander~~ a fly wheel housed in a housing and comprising a drive shaft and a plurality of blades;
 - a condensation chamber positioned inside the housing, the condensation chamber comprising an inlet and an outlet, at least a portion of the plurality of blades is disposed ~~adjacent~~ in the inlet of the condensation chamber;
 - an injection nozzle for injecting a condensable fluid towards the plurality of blades and the inlet of the condensation chamber so as to rotate the ~~expander~~ fly wheel,
 - wherein the drive shaft is mechanically coupled to an electrical converter configured to convert rotational energy of the drive shaft to electrical energy, and

wherein the condensation chamber condenses the condensable fluid after the condensable fluid passes through the plurality of blades of the ~~expander fly~~ wheel, so as to further extract energy of the condensable fluid.

52. (Previously Presented) The power unit of claim 51, wherein the electrical converter comprises an electric generator.

53. (Previously Presented) The power unit of claim 51, wherein the condensable fluid comprises superheated vapor.

54. (Currently Amended) A method of providing auxiliary power to a primary power unit, comprising:

injecting a condensable fluid towards a plurality of blades of ~~an expander~~ a fly wheel to

rotate a drive shaft of the ~~expander fly~~ wheel,

detecting a speed of the drive shaft of the fly wheel,

detecting a speed of a torque bearing element of the primary power unit,

selectively coupling the drive shaft to a torque bearing element of the primary power unit,

so as to provide the auxiliary power to the primary power unit, and

controlling the selective coupling of the drive shaft and the torque bearing element ~~with a~~

~~control system~~ based on the detected speeds of the torque bearing element and the

drive shaft,

wherein controlling the selecting coupling comprises adjusting a characteristic parameter

of the condensable fluid to adjust the speed of the drive shaft.

55. (Previously Presented) The method of claim 54, further comprising condensing the condensable fluid immediately after the condensable fluid passes through the plurality of blades.
56. (Previously Presented) The method of claim 54, wherein selectively coupling is performed by a clutch system.
57. (Canceled).
58. (Currently Amended) The method of claim 54, wherein:
- the ~~expander~~ fly wheel is housed in a housing;
 - a condensation chamber for condensing the condensable fluid is positioned inside the housing; and
 - the method further comprises condensing the condensable fluid in the condensation chamber immediately after the condensable fluid passes through the plurality of blades of the ~~expander~~ fly wheel.
- 59-61. (Canceled).
62. (New) An auxiliary power unit configured to be coupled to a torque bearing element of a primary power unit, comprising:
- an expander wheel comprising a drive shaft and a plurality of blades;
 - an injection nozzle for injecting a condensable fluid towards the plurality of blades;

- a valve configured to direct at least a portion of the condensable fluid to an accumulation tank to store the condensable fluid;
- a hydraulic connection between the accumulation tank and the injection nozzle to reuse the stored condensable fluid; and
- a clutch system configured to selectively couple the drive shaft to the torque bearing element.
63. (New) The auxiliary power unit of claim 62, further comprising a control system configured to control the clutch system to selectively couple the drive shaft to the torque bearing element.
64. (New) The auxiliary power unit of claim 63, wherein the control system comprises a first sensor for detecting a speed of the torque bearing element and a second sensor for detecting the speed of the drive shaft, the control system being configured to adjust a characteristic parameter of the condensable fluid based on the detected speeds of the torque bearing element and the drive shaft.
65. (New) A method of providing auxiliary power to a primary power unit, comprising:
- injecting a condensable fluid towards a plurality of blades of an expander wheel to rotate a drive shaft of the expander wheel;
- directing at least a portion of the condensable fluid to an accumulation tank;
- allowing the condensable fluid stored in the accumulation tank to be injected towards the plurality of blades; and
- selectively coupling the drive shaft to a torque bearing element of the primary power unit, so as to provide the auxiliary power to the primary power unit.

66. (New) The method of claim 65, further comprising controlling the selective coupling of the drive shaft and the torque bearing element by adjusting a characteristic parameter of the condensable fluid to adjust the speed of the drive shaft.

67. (New) The method of claim 65, further comprising:

detecting a speed of the drive shaft of the fly wheel,

detecting a speed of a torque bearing element of the primary power unit, and

controlling the selective coupling of the drive shaft and the torque bearing element based on the detected speeds of the drive shaft and the torque bearing element.